

Amdt. dated January 11, 2006

Reply to Office Action of August 26, 2005, and pursuant to
the Notice of Non-Compliant Amendment mailed December
12, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1.- 32. (Canceled)

33. (Currently amended) A method for facilitating the mixing of a fluid, the method comprising:

providing a container containing a polymer array having complementary probe sequences and a fluid containing at least one target molecule;

coupling the container to a holding device, ~~the holding device~~ comprising a body with a rotational axis, a pair of end members extending from the rotational axis and a plurality of walls extending between the end members parallel to the rotational axis, such that the polymer array is substantially perpendicular to the rotational axis; and

rotating the holding device body about the rotational axis such that the fluid is agitated to mix the fluid within the container.

34. (Previously presented) A method as in claim 33, wherein:

the holding device further comprises a first pair of rails fixedly attached to a first wall to form a first slot and a second pair of rails fixedly attached to a second wall to form a second slot;

the container further comprises a first end and a second end; and

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coupling the container to the holding device comprises removably positioning the first end in the first slot and removably positioning the second end in the second slot.

35. (Currently amended) A method as in claim 33, wherein the container defines a chamber, the chamber including a pair of closely spaced-apart faces that are separated by walls to define a narrow interior, wherein one of the faces defines a planar surface on which the polymer probe array is disposed.

36. (Previously presented) A method as in claim 35, wherein the walls of the chamber are set at angles sufficient to agitate the fluid when rotated.

37. (Previously presented) A method as in claim 33, further comprising rotating the body about the rotational axis at a rate in the range from about 30 rpm to about 90 rpm.

38. (Currently amended) A method for facilitating the mixing of a fluid, the method comprising:

providing a container containing a polymer array, wherein the container is only partially filled with a fluid that reacts with the polymer array to form a bubble therein;

coupling the container to a holding device, ~~the holding device~~ comprising ~~a body~~ ~~with~~ a rotational axis, a pair of end members extending from the rotational axis and one or more walls extending between the end members parallel to the rotational axis, such that the polymer array is substantially perpendicular to the rotational axis; and

rotating the holding device body about the rotational axis such that the bubble agitates the fluid to mix the fluid within the container.

39. (Currently amended) A method as in claim 38, wherein the container defines a chamber, the chamber including a pair of closely spaced-apart faces that are separated

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by walls to define a narrow interior, wherein one of the faces defines a planar surface on which the polymer probe array is disposed.

40. (Previously presented) A method as in claim 39, wherein the walls of the chamber are set at angles sufficient to agitate the fluid when rotated.

41. (Previously presented) A method as in claim 38, wherein the fluid contains at least one target molecule and the polymer array contains complementary probe sequences, wherein agitation of the fluid by the bubble increases the hybridization rate between the target molecule and the probe sequences.

42. (Currently Amended) A method for facilitating the mixing of a fluid, the method comprising:

providing an oven having an open interior;

providing a container containing a polymer array and a fluid;

coupling the container to a holding device, the holding device comprising a body with a rotational axis, a pair of end members extending from the rotational axis and one or more walls extending between the end members parallel to the rotational axis, such that the polymer array is substantially perpendicular to the rotational axis; and

rotatably positioning the holding device body within the interior of the oven and rotating the holding device body about the rotational axis such that the fluid is agitated to mix the fluid within the container; and

supplying heat to the interior of the oven while rotating the holding device body.

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43. (Previously presented) A method as in claim 42, wherein the container is only partially filled with the fluid to form a bubble therein, such that the bubble agitates the fluid to mix the fluid within the container when rotated.

44. (Currently amended) A method as in claim 42, wherein the container defines a chamber, the chamber including a pair of closely spaced-apart faces that are separated by walls to define a narrow interior, wherein one of the faces defines a planar surface on which the polymer probe array is disposed.

45. (Previously presented) A method as in claim 44, wherein the walls of the chamber are set at angles sufficient to agitate the fluid when rotated.